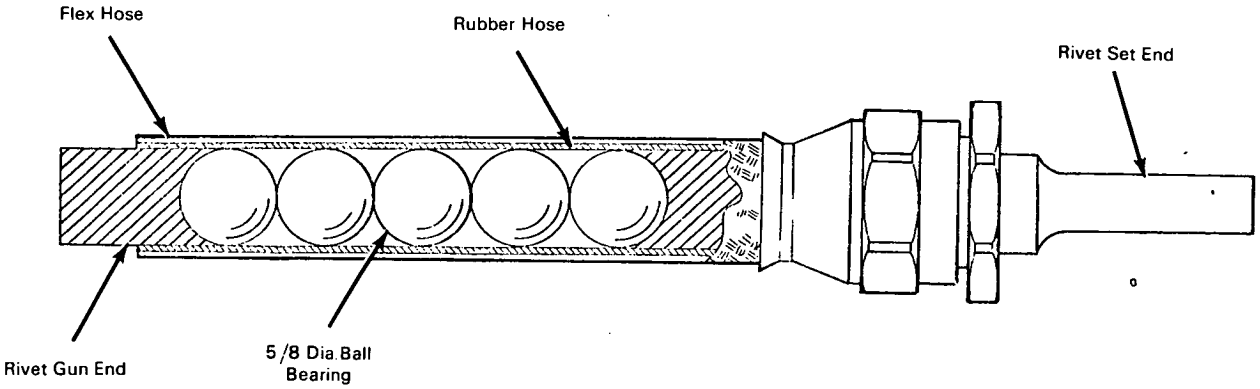
September 1969

Brief 69-10459

NASA TECH BRIEF

Flexible Rivet-Set



The problem:

To set rivets in "tight" places where the riveting head of the gun cannot be laid on the rivet. Frequently rivets must be set in places made tight by the proximity of structural members or by other factors.

The solution:

A new and very simple tool suffices for all such riveting, whereas formerly a special tool had to be fabricated for each different type of setting.

How it's done:

A typical tool consists of a 4-inch length of rubber hose, of 5/8-inch inner diameter, encased in a similar length of braided metal hose. An anvil for the riveting gun is set in one end of the rubber hose which is loaded with five steel bearing balls of 5/8-inch diameter; in the other end a rivet-set is mounted.

When this tool is flexed to any degree between the head of a riveting gun (or any impact tool) and a rivet, the loss of impact is negligible. The tool may be made in any of many diameters and lengths, and its principle and use are not restricted to riveting. The ball-to-ball line of contact might be improved by insertion of spacers. The tool may interest builders and repairers of aircraft, ships, radios, and tanks—all users of riveting guns.

Note:

No further documentation is available. Inquiries may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama 35812
Reference: B69-10459

Patent status:

This invention is owned by NASA, and a patent application has been filed. Royalty-free, nonexclusive licenses for its commercial use will be granted by NASA. Inquiries concerning license rights should be made to NASA, Code GP, Washington, D.C. 20546.

Source: William H. Hespenhide of
McDonnell Douglas Corporation
under contract to
Marshall Space Flight Center
(MFS-20317)
Category 05